

REMARKS

Claims 1-7, 9-19, 21-28, and 31-35 are currently pending. Claims 1, 9-11, 18-19, 21-23, 26, 31, and 33-35 have been amended.

The Examiner objected to the specification for including an incorrect reference number. The Applicant has amended the specification to correct the reference number error.

The Examiner objected to claims 9-11, 18-19, 21-23, 31, and 33-35 for various informalities. Applicant has amended claims 9-11, 18-19, 21-23, 31, and 33-35 to correct the Examiner's objections. The amendments to the claims may clarify the claims. However, the amendments do not narrow the claims in any way.

The Examiner rejected claims 1-2, 5-6, and 9-11 under 35 U.S.C. §102(e) as being anticipated by Immel (U.S. Patent No. 6,612,275).

Amended claim 1 defines a valve-operating lever that includes a connector member and a valve arm having a first aperture defining a valve arm engagement portion. A first stop cooperates with the connector member to at least partially define a first engagement portion. The valve arm engagement portion engages the first engagement portion. A second stop is positioned such that the valve arm is sandwiched between the first stop and the second stop. The first stop and second stop are in contact with the valve arm to inhibit movement of the valve arm along a longitudinal axis defined by the connector member.

Immel does not teach or suggest, among other things, a valve-operating lever that includes a first stop and a second stop that contact the valve arm to inhibit movement of the valve arm along a longitudinal axis defined by the connector member. In addition, Immel does not teach or suggest a valve arm that is sandwiched between a first stop and a second stop. Rather, Immel discloses a follower arm 218a that includes a follower portion 220a that

rides on a cam to actuate a valve 232a. The follower arm 218a includes an adjusting screw 228 that is locked in place by a nut (unnumbered). The screw 228 engages the valve 232a such that pivoting motion of the follower arm 218a produces a reciprocating motion of the valve 232a. The Examiner points to the screw 228 as a connector member. The Examiner identifies the nut as a first stop and the valve keeper 236 as the second stop. However, the valve keeper 236 engages the valve spring 234 and does not necessarily engage or contact the follower arm 218a. In fact, the valve keeper is not part of the follower arm and likely contacts the screw 228 and not the follower arm 218a. Thus, the follower arm 218a is not sandwiched between, and in contact with, the nut and the valve keeper 236 such that the nut and valve keeper 236 cooperate to inhibit movement of the follower arm 218a along a longitudinal axis defined by the screw 228. In fact, the follower arm of Immel *must* move along the longitudinal axis defined by the screw 228 in order for the device to function.

In light of the foregoing, Immel does not teach or suggest each and every limitation of claim 1. As such, claim 1 is allowable. In addition, claims 2, 5-6, and 9-11, which depend from claim 1, are allowable for these and other reasons.

The Examiner also states that “when a product by process claim is rejected over a prior art product such as that shown in Immel, which appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two.” Applicant disagrees with this statement, in that claim 1 and claims 2-7, 9-19, and 21 recite structure and not process. A product-by-process claim is “a product claim that defines the claimed product in terms of the process by which it is made.” *MPEP* §2173.05(p). As such, it is improper to categorize these claims as product-by-process claims. Applicant asks that the Examiner identify the

manufacturing steps that define the product and that are recited in the claims. Furthermore, it is incorrect to state that the follower arm of Immel is “identical” to the valve-operating lever of claim 1. As such, the burden remains with the Examiner to show that the claims are not patentable and Applicant respectfully requests that the Examiner withdraw the statement that the claims are product-by-process claims.

The Examiner rejected claims 1-6, 9-18, and 21 under 35 U.S.C. §102(b) as being anticipated by Okubo (U.S. Patent No. 6,199,527). Alternatively, the Examiner rejected claims 1-6, 9-18, and 21 under 35 U.S.C. §103(a) as being unpatentable over Okubo.

Amended claim 1 defines a valve-operating lever that includes a connector member and a valve arm having a first aperture defining a valve arm engagement portion. A first stop cooperates with the connector member to at least partially define a first engagement portion. The valve arm engagement portion engages the first engagement portion. A second stop is positioned such that the valve arm is sandwiched between the first stop and the second stop. The first stop and second stop are in contact with the valve arm to inhibit movement of the valve arm along a longitudinal axis defined by the connector member.

Okubo does not teach or suggest, among other things, a valve operating lever that includes a first stop and a second stop positioned to sandwich the valve arm therebetween. In addition, Okubo does not teach or suggest a first stop and a second stop that contact the valve arm to inhibit movement of the valve arm along a longitudinal axis defined by the connector member. Rather, Okubo discloses a valve operating lever that includes a valve arm 113 and a connector member 115. The connector member 115 includes a groove that is caulked or peened to deform the end of the connector member to form a first stop. However, there is no second stop that is in contact with the valve arm. Thus, the valve arm is not in contact with a

first stop and a second stop to inhibit movement along the longitudinal axis defined by the connector member, nor is the valve arm 113 sandwiched between a first stop and a second stop.

With regard to the 35 U.S.C. §103(a) rejection, the Examiner states “it would have been obvious . . . to have additional end stops on the said connector member to engage with the said follower arm, since the use thereof would provide an improved valve actuating lever.” The fact that a claim recites additional limitations that produce a superior device does not render the claim obvious. The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425, 208 U.S.P.Q. 871, 881 (CCPA 1981). In proceedings before the Patent and Trademark Office, the Examiner bears the burden of presenting a prima facie case of obviousness based upon the prior art. *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q. 2d 1438, 1442 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *Id.* Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (CCPA 1974); *MPEP* §§706.02(j), 2143.03.

The Examiner has not cited any references that teach or suggest each and every claimed limitation recited in claim 1. Even if the Examiner finds a reference that teaches the

limitations, it is incumbent upon the Examiner to show a motivation to combine the teachings and a likelihood of success. Simply stating that the resultant device would be superior to the prior art device does not relieve the Examiner of these obligations.

The Examiner again states that claim 1 is a product-by-process claim and that the device of Okubo appears to be identical to the recited device. In addition, the Examiner states that because the claim is a product-by-process claim, the burden of proving non-obviousness shifts to the Applicant.

Applicant disagrees with the Examiner's assertion that the device of Okubo is identical to the recited device. Applicant has pointed to several differences in responding to the 35 U.S.C. §102(b) rejections. In addition, Applicant disagrees with the Examiner's assertion that claim 1 is a product-by-process claim. A product-by-process claim is "a product claim that defines the claimed product in terms of the process by which it is made." *MPEP* §2173.05(p). Claim 1 recites structure not process, and cannot be classified as a product-by-process claim. As such, Applicant respectfully requests the withdrawal of this classification. Alternatively, Applicant requests a detailed explanation of the Examiner's rationale used to determine that claim 1 is a product-by-process claim.

In light of the foregoing, Okubo does not teach or suggest each and every limitation of claim 1. As such, claim 1 is allowable. In addition, claims 2-6, 9-18, and 21, which depend from claim 1, are allowable for these and other reasons.

The Examiner rejected claim 7 under 35 U.S.C. §103(a) as being unpatentable over Immel in view of Zubeck (U.S. Patent No. 6,550,435). In addition, the Examiner rejected claims 7 and 19 under 35 U.S.C. §103(a) as being unpatentable over Okubo in view of Zubeck.

Claims 7 depends from claim 1 and adds that at least one of the valve arm engagement portion and the first engagement portion includes knurls. Claim 19 depends from claim 1 and adds that at least one of the first engagement portion and the second engagement portion includes a portion having knurls.

As discussed with regard to claim 1, neither Immel nor Okubo teach or suggest the limitations of claim 1. Zubeck does not cure the deficiencies of Immel or Okubo.

Zubeck does not teach or suggest a valve-operating lever that includes a first stop and a second stop in contact with a valve arm to inhibit movement of the valve arm along a longitudinal axis defined by a connector member. Rather, Zubeck discloses an adjustment cam 48 that is press fit, or otherwise secured, to a lash pin 36. There is no mention of a first or a second stop, much less sandwiching the adjustment cam 48 between a first stop and a second stop.

In light of the foregoing, Immel and Okubo alone or in combination with Zubeck do not teach or suggest each and every limitation of claim 7. In addition, Okubo and Zubeck, alone or in combination, do not teach or suggest each and every limitation of claim 19. As such, claims 7 and 19 are allowable.

The Examiner rejected claims 22-28 and 31-35 under 35 U.S.C. §103(a) as being unpatentable over Gracyalny (U.S. Patent No. 6,349,688) in view of Okubo and Zubeck.

Amended claim 22 defines a direct lever system for an engine that includes, among other things, a connector member having a follower arm end defining a first reduced-diameter portion and a valve arm end defining a second reduced-diameter portion separate from the first reduced-diameter portion.

Gracyalny discloses a direct lever system for an engine that includes a connector member. However, there is no teaching or suggestion that the connector member includes first and second reduced-diameter portions that are separated from one another.

Okubo does not teach or suggest a connector member that includes first and second reduced-diameter portions that are separated from one another. Rather, Okubo discloses a rocker arm that includes a valve arm and a connector member 115. The connector member is peened or caulked at both ends to create deformed portions. The deformed portions establish a single reduced-diameter portion in the middle of the connector member. Thus, Okubo does not teach or suggest a connector member that includes first and second reduced-diameter portions that are separated from one another.

Zubeck also does not teach or suggest a connector member that includes first and second reduced-diameter portions that are separated from one another. Rather, Zubeck discloses an adjustment cam 48 that is press fit or otherwise secured to a lash pin 36. There is no mention of a first reduced-diameter portion or a second reduced-diameter portion.

The Examiner again attempts to shift the burden of production of evidence establishing non-obviousness to the Applicant by stating that claim 22 is a product-by-process claim. As stated, a product-by-process claim is “a product claim that defines the claimed product in terms of the process by which it is made.” *MPEP* §2173.05(p). Claim 22 recites only structure. Claim 22 does not contain limitations that could be fairly interpreted as process limitations. Furthermore, the structure recited in claim 22 is different from that shown in any of the references cited by the Examiner. As such, Applicant requests that the Examiner withdraw the determination that the claims are product-by-process claims.

Alternatively, Applicant respectfully requests a full description of the Examiner's reasoning as to why it is believed that claim 22 is a product-by-process claim.

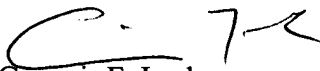
In light of the foregoing, Gracyalny, Okubo and Zubeck, alone or in combination, do not teach or suggest each and every limitation of claim 22. As such, claim 22 is allowable. In addition, claims 23-28 and 31-35, which depend from claim 22, are allowable for these and other reasons

CONCLUSION

In light of the foregoing, Applicant respectfully submits that Claims 1-7, 9-19, 21-28, and 31-35 are allowable.

The undersigned is available for telephone consultation during normal business hours.

Respectfully submitted,


Casimir F. Laska
Reg. No. 30,862

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Michael Best & Friedrich LLP
100 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4108

(414) 271-6560